

### **(57) Abstract**

The invention relates to a method and arrangement for receiving a frequency modulated signal, and especially for demodulating the signal. The invention is applicable especially in the receiver of a mobile station. One idea of the invention is to convert a radio frequency, frequency modulated signal directly into a low-frequency signal, and to perform the demodulation by forming by means of the falling and rising edges of said low-frequency signal a second signal, the frequency of which is twice the frequency of the low-frequency signal, and by frequency detecting said second signal. By means of the invention, the advantages of the direct conversion technique, such as low power consumption, are achieved in the reception of the frequency modulated signal,. The required components can be advantageously manufactured on an integrated circuit. Besides these advantages, a good quality of the detected signal is achieved.

Figure 3